

Behavioral Approach to Insurance: A Brief Guide to the Main Effects and Application to Insurance



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Psychologist Daniel Kahneman was awarded the 2002 Nobel Prize in Economics for his research into how human beings behave when making economic decisions. His findings challenged assumptions that humans act rationally in these situations. Since then the psychological study behind judgment and decision-making in financial situations has become known as behavioral economics, and has spread to the fields of social science, marketing, economy, finance and insurance.

Purpose

The purpose of this article is twofold: first to report some of the main effects and biases observed and documented in this ongoing research, showing how these may apply to the insurance industry from distribution to claims. This includes information about where the research confirms behavior long recognized by the industry. Second, this article looks at the methodology used in this research, comparing a "laboratory experiments" approach to a more traditional, theoretical approach that is common in economics and in insurance where a model is built and then tested on available data. As our industry has been exposed to the "lab" approach from behavioral economics studies we are starting to see potential in how such methodologies can be applied to the distribution of financial and insurance products.

Some interesting examples of phenomena studied by various authors are:

Procrastination and lack of self-control

Making decisions and translating these into action can be extremely tiring, requiring a subject to figure out her/his current situation and what has to change in order to reach a future objective. As such, a tendency to maintain the status quo can be noticed. Instead of reporting the numerous studies showing this effect or bias (which leads to sub-optimal choices), let's look



at an experiment developed by Richard Thaler and Shlomo Benartzi, two well-known behavioral economists. In cooperation with companies and investment managers, they designed a product to increase savings rates. The investment decision was linked to scheduled future salary increases. The purpose of the program was to overcome barriers to saving by creating a commitment to take action in the future (immediate gratification vs. longer-term rewards), aligning savings increases with pay increases (eliminating the feeling of loss caused by a reduction in pay) and making future savings rate increases automatic (to counteract the power of inertia).

The program was actually applied in real life to a group pension product and achieved extremely positive results. In one case, nearly 80% of employees participated, and 80% of those stuck with the program for more than three years. Savings as a percent of income increased from 3% to 14%. The same reasoning can be applied to any cover in which a phase of accumulation is required such as long term care, whole life and similar. The pre-ordered pattern of premiums (and therefore of benefits) is also a way to protect against adverse selection.

Imperfect perception of probability and representativeness

Calculating probabilities and ranking for probable outcomes is hard even for experts. There is extensive literature from experiments carried out by Kahneman, Tversky and others that shows how probability can be counter-intuitive and that the human mind often relies on **representativeness**. That is, when faced with a complicated or unfamiliar scenario, we tend to build reliable and plausible stories which are easy to believe and trust. This effect, (or better, this fallacy) can also apply to our “non-decision” to buy a specific protection because we think that the probability of death or illness is extremely low now (which is true), but without taking into consideration the higher probability of such an event in a long term horizon, or applying other relevant information. You’ll notice that the communication strategies and advertising in the insurance business rarely rely on improving the knowledge of customers in terms of the actual risks and probability of events. In some countries the message passed to the customers is completely focused on positive aspects (service, protection in general terms) without any mention of negative events. This seems to be quite opposite to the style, for example, of the strong non-smoking campaigns launched by many governments.

Availability

In order to assess the probability of a negative event, people tend to use examples which are readily available. Risk assessment can be extremely biased by the way, for example, in which news is reported by the media, or by recent high-profile events. An example is the study from Howard Kunreuther that highlights how Californians are diligent in purchasing earthquake insurance and damage mitigation—but not until just after dramatic events. It requires a clear demonstration of risk to motivate a consumer. Another very interesting study comes from Paul Slovic about perceptions on the causes of death. The conclusion of the study is clear: “Estimates of cause of death are warped by media coverage,” therefore violent and accidental causes of death are overestimated compared to others.

But what consequences can stimulate the availability effect on purchasers of protection products? In most situations it is difficult for consumers to buy insurance after a negative event such as illness or disability, and there is no second chance opportunity to buy life

insurance after having died. The solution set by Kunreuther and also by the industry over time is based on three “**Information Principles**” which the author says should “make accurate risk assessment available to everyone; estimate for interdependencies; and detect and adjust strategies for behavioral biases.” The outcome of the risk assessment should allow all potential buyers to understand that a fair premium is charged and that a specific coverage is convenient to the customer. One interesting outcome of the academic studies is that the projections should avoid premium averaging as much as possible in order to charge the fairest price to the customer. This principle can be in contrast with others (e.g., Gender Directive).

Purchaser behavior

In mentioning the real life experiment by Thaler and Benartzi earlier I noted the peculiar methodology applied in the field of behavioral economics where the trip from theory and experience is a two-way path that can start from both sides. Theories have been tested in many contexts through interviews and others means such as fMRI (functional magnetic resonance imaging). Behavioral economics is clearly a multidisciplinary field where economists, psychologists, neuroscientists and other specialists from the business side can work together to find models that can fit economic and social dynamics, define strategies and solutions to push policies (the environment is a rich field, for example), and find smart ways to distribute products.

In terms of insurance products, there has been research using field trials by various entities (FCA included) showing the impact of different forms of communications and questions posed to clients or potential clients in obtaining completely different answers and levels of disclosure.

Our contribution

The insurance world can contribute more in this field with the goal of making its interaction with customers more efficient and transparent. By improving our understanding of the human behavior involved in making economic choices, we can not only improve the willingness to buy by removing some of the biases listed above (and also others not mentioned here), but also allow our companies to shape communication and messages that let our customers better understand the value of the products the insurance industry provides to this more and more complex society. ■

